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| Autore | Cupillari Antonella |
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| Descrizione fisica | 1 online resource (193 p.) |
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| Soggetti | Proof theory<br>Electronic books. |
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| Nota di bibliografia | Includes bibliographical references (p. 173-176) and index. |
| Nota di contenuto | Front Cover; The Nuts and Bolts of Proofs; Copyright Page; List of Symbols; Contents; Preface; Chapter 1. Introduction and Basic Terminology; Chapter 2. General Suggestions; Chapter 3. Basic Techniques to Prove If/Then Statements; Direct Proof; Related Statements; Proof by Contrapositive (AKA Proof by Contradiction or Indirect Proof); How to Construct the Negation of a Statement; Chapter 4. Special Kinds of Theorems; ""If and Only If"" or ""Equivalence Theorems""; Use of Counterexamples; Mathematical Induction; Existence Theorems; Uniqueness Theorems; Equality of Sets; Equality of Numbers<br>Composite StatementsLimits; Chapter 5. Review Exercises; Chapter 6. Exercises Without Solutions; Chapter 7. Collection of Proofs; Chapter 8. Solutions for the Exercises at the End of the Sections and the Review Exercises; Solutions for the Exercises at the End of the Sections; Solutions for the Review Exercises; Chapter 9. Other Books on the Subject of Proofs and Mathematical Writing; Index; A Guide to Selecting a Method of Proof |
| Sommario/riassunto | The Nuts and Bolts of Proof instructs students on the basic logic of mathematical proofs, showing how and why proofs of mathematical statements work. It provides them with techniques they can use to |

gain an inside view of the subject, reach other results, remember results more easily, or rederive them if the results are forgotten.A flow chart graphically demonstrates the basic steps in the construction of any proof and numerous examples illustrate the method and detail necessary to prove various kinds of theorems.* The ""List of Symbols"" has been extended.* Set Theory section ha